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"Jeff Freidberg" <jpfreid@MIT.EDU> on 10/10/2001 10:08:50 AM

To: spencer.abraham@hq.doe.gov
cc: YMP.SR@ymp.gov, robert.card@hq.doe.gov, lake.barrett@nw.doe.gov, pbernstein@pcgpr.com
Subject: "RE: Possible Site Recommendation for Yucca Mountain"

Dear Secretary Abraham,

I am writing to you to provide input into the upcoming decision regarding the Yucca Mountain project. In my view we are long overdue for the creation of a repository for high level nuclear wastes and the spent fuel from commercial nuclear power plants.

There has been an enormous amount of analysis, data collection, modeling, and planning regarding the site and on the basis of this knowledge, Yucca Mountain seems quite appropriate as a repository. The safety of the design well satisfies EPA and NRC standards. Also, the remoteness of the location further reduces the number of citizens living in proximity to the site.

The environmental risks seem truly minimal and this has to be compared to the present state of affairs wherein spent fuel is stored above ground, on the sites of approximately 70 nuclear power facilities. In the medium to long run I believe we will have much better control, accountability, and security if all the spent fuel is stored at one central, remote location. A single dedicated facility would appear to represent a better strategy for quality control than the periodic disposal of spent fuel as each plant, at its own time, is decommissioned by different groups with varying levels of experience.

Another feature of the proposed plan that I strongly support is the decision not to close the mountain immediately, but instead at some future date. In this connection it is critical that the site be open and accessible for inspection for a period of time on the order of one hundred years. This would allow time to monitor and detect any unexpected water seepage, and if so to take corrective action. It also allows for the possibility of advanced technologies improving the storage durability or perhaps even

recovering some of the fuel for future nuclear reactors when the process becomes more economical. There are probably several decades worth of electricity (at the current rate produced by US nuclear power plants) stored in the spent fuel of existing power plants and it would be a shame not to maintain this as an option.

In summary, I would strongly support your recommendation to the President to prepare Yucca Mountain as a geologic repository site for spent nuclear fuel.

Sincerely yours,

Jeffrey Freidberg
Professor and Head, Nuclear Engineering Department
MIT